

mortality, available treatment options, as well as healthcare resource utilization and medical costs associated with pancreatic cancer. Critical analyses of study quality and data gaps were analyzed at the country level. **RESULTS:** A total of 328 studies were identified based on the keywords. Of these, 32 studies met the inclusion criteria. Studies indicate that pancreatic cancer has an extremely poor prognosis: for all stages combined, the 1- and 5-year relative survival rates are 25% and 6%, respectively. Pancreatic cancer is the fourth most common cause of cancer-related deaths in the United States and the eighth worldwide. More than 50% of patients come to clinical attention with metastatic disease, and an additional 30%–40% present with locally advanced tumors. Current treatments include surgery and palliative chemotherapy such as gemcitabine and gemcitabine/erlotinib combination. Recently nab-paclitaxel was approved based on a 1.8 month improvement in the overall survival. **CONCLUSIONS:** This systematic review shows that patients with pancreatic cancer have a very low survival rate. There is an urgent need for new treatments for these patients.

PCN54

SYSTEMATIC REVIEW OF EPIDEMIOLOGY AND BURDEN OF CUTANEOUS T-CELL LYMPHOMA

Aggarwal S, Topaloglu H

NOVEL Health Strategies, Chevy Chase, MD, USA

OBJECTIVES: Cutaneous T-Cell Lymphoma (CTCL) is a rare and serious cancer with significant deterioration in patient quality of life. The objective of this research was to conduct a systematic review of epidemiology and the burden of CTCL. **METHODS:** A systematic literature search for epidemiology and the burden of disease studies was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar and Cochrane. Data was collected for the study type, methods, country and key findings. Extracted study data included: CTCL incidence, complications, mortality, available treatment options, as well as healthcare resource utilization and medical costs associated with CTCL. Critical analyses of study quality and data gaps were analyzed at the country level. **RESULTS:** A total of 50 studies were identified based on the keywords. Of these, 14 studies met the inclusion criteria. Studies indicate that CTCL is a group of disorders characterized by localization of neoplastic T lymphocytes to the skin. Annual overall incidence of CTCL was 6.4 per million persons between 1973 and 2002. CTCLs accounted for 71%, with Mycosis fungoides (MF) and Sézary syndrome (SS) representing the most common sub-types (54% of all CTCLs). CTCL is associated with a significant symptom burden. Pruritus appears to be one of the most prominent and disturbing symptoms. All aspects of QOL are affected in CTCL. Two new treatments were approved for CTCL during 2009–2012 (US), however, the unmet need remains high. **CONCLUSIONS:** This systematic review shows that patients with CTCL have a very poor prognosis and serious deterioration in quality of life. There is an urgent need for new treatments for these patients.

PCN55

RATES, TIMING, AND COSTS OF SHORT-TERM DISABILITY (STD) AND LONG-TERM DISABILITY (LTD) IN PATIENTS WITH NEWLY DIAGNOSED ADVANCED MELANOMA

Hallmeyer S¹, Gilloteau I², Limone B³, Johnson W³, Malangone-Monaco E³¹Oncology Specialists SC, Park Ridge, IL, USA, ²Bristol-Myers Squibb, Lawrenceville, NJ, USA,³Truven Health Analytics, New York, NY, USA

OBJECTIVES: Data on the association of disability with advanced melanoma are limited. This exploratory retrospective cohort study determined rates, timing, and costs of STD and LTD in adult patients with newly diagnosed advanced melanoma. **METHODS:** The sample was derived from US administrative claims databases (Truven Health MarketScan®). Disability costs were adjusted to 70% of an estimated \$30/hour replaced wage. **RESULTS:** Between April 1, 2011, and December 31, 2012, 1,052 patients were diagnosed with advanced melanoma. Of these, 109 patients (mean age, 51.1 years; 92.7% employed full-time) had data eligibility, among whom 94 and 95 had STD or LTD eligibility, respectively. Fourteen and 9 patients went on STD or LTD, respectively; 2 went on both. Mean time between diagnosis and STD or LTD was 115.0 days and 221.8 days, respectively. Mean number of STD and LTD days were 67.2 and 105.7, respectively. Seven STD and 6 LTD patients received melanoma-specific treatment. Mean time between treatment initiation and STD or LTD was 59.4 and 202.5 days, respectively. Mean number of on-treatment days (time from treatment initiation until the run-out date, defined by the supply for oral/subcutaneous products or expected clinical benefit for infused products) was 16.4 during STD and 25.1 during LTD. Among STD and LTD patients with a return-to-work record (n=14 and n=5, respectively), mean time to work re-entry was 85.6 and 76.4 days. Mean costs to employers were similar for STD and LTD (\$1,302/patient/month vs \$1,349/patient/month). **CONCLUSIONS:** This study provides preliminary estimates of the course of work disability and associated costs in patients with newly diagnosed advanced melanoma. Melanoma often affects younger patients thus it is important to refine the estimated burden associated with lost work productivity in a larger sample with long-term follow up. Future research must also explore the impact of recently introduced melanoma therapies on this burden.

PCN56

REVIEW OF DISEASE BURDEN OF LUNG CANCER IN CHINA'S BEIJING AND SHANGHAI

HU C¹, Huang L², Zhao D², Xu L²¹Astrazeneca(China), Beijing, China, ²Astrazeneca (China), Beijing, China

OBJECTIVES: Lung cancer has now become NO.1 disease of all cancers in both incidence and mortality in China. Since lung cancer imposes great disease and economic burden on patients in China, lots of studies have investigated national status of disease burden of lung cancer. However, few studies pay attention to disease burden of lung cancer in China's super big cities, such as Beijing & Shanghai. Our study aims to review lung cancer's burden in Beijing and Shanghai to inform policy making. **METHODS:** A comprehensive literature review of disease burden of lung cancer in Beijing Shanghai was conducted. "CNKI" and "Wanfang data", the biggest databases

for Chinese journals, were searched through to Dec. 31th, 2014. **RESULTS:** In 2010, incidence and mortality of lung cancer in China are 46.08/105 and 37.00/105. DALYs (disability adjusted life years) and economic burden of lung cancer are extremely high in both Beijing and Shanghai. DALYs of lung cancer are 42219.38 and 91962.18 in Beijing and Shanghai respectively. And average hospitalization expenditures per lung cancer inpatient are ¥38595.00 and ¥50026.65, among which average drug costs per inpatient are as high as ¥18139.65(46.97%) and ¥30356.00(60.68%). **CONCLUSIONS:** Lung cancer has made Chinese patients incur great loss in both DALYs and money, which is a conspicuous reminder to policy makers to pay more attention to management of the raging disease. And early prevention and screening of lung cancer should be priorities to slow increasing speed of disease burden.

PCN57

ACCESS OF ORAL CHEMOTHERAPY FOR NON-SMALL CELL LUNG CANCER (NSCLC) IN FIRST LINE TREATMENT IN BRAZIL: IMPACT TO THE PATTERNS OF CARE AND COST OF ILLNESS

Piedade A¹, Goes L², Minowa E¹, Castro AP³, Alves AF¹¹Evidências - Kantar Health, Campinas, Brazil, ²Evidências Credibilidade Científica, São Paulo,Brazil, ³Evidências, Campinas, Brazil

OBJECTIVES: Previous real world data from 2013 showed the patterns of care of first-line NSCLC treatment in the Brazilian supplementary health system: carboplatin with pemetrexed (29.7%), bevacizumab containing regimens (20.8%) and oral chemotherapy (6%). The same study reported the average cost of management of this patients as 19,001.79USD. However, treatment patterns and cost of illness may have changed after enacting of a federal law (number 12880/2013) that has established the mandatory coverage of oral chemotherapy by the supplementary system. Therefore, the aim of this analysis was to evaluate the impact of oral chemotherapy incorporation in the patterns of care and cost of illness of first-line NSCLC treatment in Brazil. **METHODS:** All metastatic NSCLC patients receiving first-line treatment during 2014 were eligible and retrieved from the private market administrative claims database (Evidências - Kantar Health database). Patterns of care were evaluated and compared before and after introduction of law 12880/2013. The cost of illness was calculated by a bottom-up approach. Exams, fees, and associated drugs reported were also considered for costing and values were derived from Tables Simpro and CBHPM. Exchange rate used was 1.00USD = 2.20BRL. **RESULTS:** We studied 110 patients with first-line NSCLC and found 19 different chemotherapy regimens. We observed few changes in the patterns of care: carboplatin with pemetrexed is still the most used (32.7%), followed now by carboplatin with paclitaxel (19.1%) and bevacizumab containing regimen (16.4%). Oral chemotherapy represented 9.1% of the regimens. Costs of schemes ranged from 4,963.75USD to 52,374.55USD and the calculated average cost of management of one patient is 23,725.76USD. Additionally, there was a significant increase in the number PET CT required, from 28% in 2013 to 48% in 2014. **CONCLUSIONS:** We observed a low impact of oral chemotherapy incorporation in the patterns of care and cost of illness of first-line NSCLC treatment.

PCN58

HEALTHCARE UTILIZATION AND COSTS ASSOCIATED WITH MULTIPLE SWITCHING OF TYROSINE KINASE INHIBITOR THERAPY IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA

Kropf P¹, Barnes G², Tang B², Pathak A², Issa J³¹Fox Chase Cancer Center, Philadelphia, PA, USA, ²Teva Pharmaceutical, Frazer, PA, USA, ³Temple

University School of Medicine, Philadelphia, PA, USA

OBJECTIVES: Tyrosine kinase inhibitors (TKIs) represent the standard therapy to manage chronic myeloid leukemia (CML) and have resulted in a greatly reduced mortality rate. However, up to 40% of patients experience first-line failure, with many patients experiencing second-line. This analysis examined healthcare utilization and costs for CML patients that switched to a third-line TKI after having failed both first- and second-line TKI therapy. **METHODS:** Patients with a CML diagnosis during 1/1/2010–7/31/2014 and a subsequent claim data for a first-, second-, and third-line TKI were identified from the Truven Health MarketScan® Research Databases. Inclusion criteria: ≥18 years, continuous enrollment from 3 months prior to 6 months post first TKI treatment, no stem cell transplant, and switched to second- and third-line TKIs. Healthcare utilization and costs were calculated on a per-month basis between (1) initiation of first-line TKI until the switch to second-line TKI and (2) between second-line TKI initiation until the switch to third-line TKI. Nonparametric tests were used to test for differences. **RESULTS:** 137 patients were identified (male=532%; female=46.8%; mean age=57.34 years). Average duration of first-line TKI therapy was 301.62 days and 269.36.9 days for second-line. Although there were large differences among patients, overall, the number of monthly outpatient visits was higher (p<.05) during second-line therapy (mean=10.51; SD=12.32) relative to first-line therapy (mean=9.48; SD=11.37). There were no significant differences in monthly emergency room visits or hospitalizations. Healthcare costs were higher (p<.05) during second-line therapy than first-line therapy averaging \$19,764 vs. \$13,283 respectively. **CONCLUSIONS:** Experiencing treatment failure and switching to a second- and third-line TKI represents disruption in therapy and was associated with substantial healthcare utilization and economic burden for patients with CML. This was especially more costly and burdensome for patients who failed the second-line TKI therapy, as multiple TKI switches were associated with a greater number of outpatient visits and higher healthcare costs.

PCN59

DIRECT MEDICAL COSTS OF HER2 POSITIVE BREAST CANCER MANAGEMENT IN IRAN: A CLAIMS DATABASE AND DATA MINING ANALYSIS

Ansari-pour A¹, Zendehehd K², Uyl - de Groot CA¹, NaemiSanatdost A³, Redekop WK¹¹Erasmus University Rotterdam, Rotterdam, The Netherlands, ²Tehran Medical Sciences andMedical education University, Tehran, Iran, ³Independent researcher, Virginia Beach, SC, USA

OBJECTIVES: HER2 positive breast cancer management can be costly when a monoclonal antibody treatment like trastuzumab is used. This is particularly problematic in middle-income countries with a national health insurance system, which have